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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,883	02/15/2007	Nicolas Drolet	19226-US-NP	9927
23553	7590	03/30/2011	EXAMINER	
MARKS & CLERK			SUCH, MATTHEW W	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/573,883	DROLET ET AL.
	<b>Examiner</b> MATTHEW W. SUCH	Art Unit 2891

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 January 2011.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 17-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 17-26 and 29-34 is/are rejected.
- 7) Claim(s) 27 and 28 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-878)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No./Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No./Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 January 2011 has been entered.

### **Terminal Disclaimer**

2. The terminal disclaimer filed on 21 January 2011 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 10/568,303 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### **Claim Rejections - 35 USC § 112**

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 17-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, claim 17 sets forth a compound of formula (I), which contains fluorene units at either end of the molecule. No compound containing fluorene units in such a formula is disclosed in the Application. Instead, the disclosure is directed to compounds having carbazole units. Claims 18-25 are rejected based on their dependency from claim 17.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 sets forth the compound of RCPCR. However, this renders the claim indefinite because the chemical formula of RCPCR is not described by the formula (I) set forth in claim 17. RCPCR sets forth carbazole units in the compound, instead of the fluorene units set forth in formula (I).

7. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 19 sets forth the compound of CPC. However, this renders the claim indefinite because the chemical formula of CPC is not described by the formula (I) set forth in

claim 17. CPC sets forth carbazole units in the compound, instead of the fluorene units set forth in formula (I).

8. Claims 26 and 29-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 26 recites "a polymer which is the reaction product of a first compound defined by Formula II". The phrase renders the claim indefinite because the claim fails to identify the compound being claimed and instead merely recites some precursor thereto. The scope of the claim is indefinite because it is unknown what the actual polymer being claimed is. A recitation to a precursor is not sufficient to establish scope for the polymer since it is unknown how the precursor is to be reacted, what else is reacted with the precursor, or even if the precursor is present in the polymer at all, and if so whether the precursor is present in the exact claim formula or if various functional groups are added or subtracted therefrom.

#### **Allowable Subject Matter**

9. In so far as definite, claims 27 and 28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: In so far as claims 27 and 28 are definite, a search of the prior art does not teach or reasonably

suggest the organic based device being an organic photovoltaic cell comprising the compound of PCVDPATA (claim 27) or PPCVT (claim 28) as a first active material in the device.

**Response to Arguments**

11. Applicant's arguments with respect to claims 17-34 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kim ('974) teaches copolymers comprising fluorene units and carbazole units.

**Contact Information**

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW W. SUCH whose telephone number is (571)272-8895. The examiner can normally be reached on Monday - Friday 9AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kiesha Bryant can be reached on (571) 272-1844. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew W. Such/  
Primary Examiner, Art Unit 2891